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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,289	04/27/2006	Oliver Bimber	F-9054	4854
28107 7590 12/17/2007 JORDAN AND HAMBURG LLP 122 EAST 42ND STREET SUITE 4000 NEW YORK, NY 10168			EXAMINER DOAK, JENNIFER L	
			ART UNIT 2872	PAPER NUMBER
			MAIL DATE 12/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/577,289	BIMBER, OLIVER	
	Examiner	Art Unit	
	Jennifer L. Doak	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/27/06; 11/06/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The title of the invention is not descriptive. Specifically, statements concerning the general type or nature of the entire system or its components that are common to most other similar systems that are known in the art do not suggest the point of novelty, to which the title should at least allude. Although statements of general system types and so forth are important for contextualizing the novelty, the title should also be directed to encompass what Applicant considers as the point of novelty claimed. A new title is required that is clearly indicative of the invention to which the claims are directed.

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

A substitute specification including the claims is required pursuant to 37 CFR 1.125(a) because it appears to be a direct translation, and is not currently in proper idiomatic English.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version

(without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the conjunction of lit and unlit holographic portions with the graphics as described in the specification (at para. 23 in this Application's Pre-Grant Publication US 2007/0081207). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(b) because they are incomplete.

37 CFR 1.83(b) reads as follows:

When the invention consists of an improvement on an old machine the drawing must when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 5-21 are objected to under 37 CFR 1.75(c), as being of improper dependent form because a multiple dependent claim cannot depend from any other multiple dependent claims. See MPEP §608.01(h). Accordingly, these claims have not been further treated on the merits.

Claim 1 is objected to because the word “overlayed” is properly spelled “overlaid.” Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

First, the claim language first claims “a semi-transparent optical element” and later “an optical element,” and while this claim language does not indicate that these are the same element, they are both identified with the same element number. Such misidentification confuses the metes and bounds of the claim.

Second, the claim uses the language “video projector” while the specification discusses this element in terms of a point light source. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999).

The term “video projector” has specific meaning in the art that typically relates to playing or recording moving images to be projected on a television screen. Such structure is not what appears to be intended, and Applicant is asked to modify this

language to direct it toward that which is part of the invention. In addition, it is unclear either from the specification or claims what exactly is the illumination image; whether it is video projected graphics somehow relating to the display panel or mask for holographic illumination is unclear. The term is indefinite because the specification does not clearly redefine the term.

Third, the claim uses the language "the hologram appears [overlaid] with the picture of the display." No picture has been previously mentioned in the claim, so "the picture" has no antecedent basis in the claim, and its use and source are additionally unclear except to somehow be tied with a display, but whether it was the video projector or an LCD screen or some other image source is unclear.

Fourth, the use of the term "overlay" in the claim is confused by the disclosure, since the disclosure seems to describe selected illuminated portions of the hologram while placing the graphics display in the non-illuminated hologram portions (para. 23 of the application's Pre-Grant Publication US 2007/0081207). However, Fig. 2 shows an occultation of a hologram portion by graphics. It is unclear from the claim language which of these two interpretations, if either, is being claimed.

Fifth, the claims states, "... and simultaneously a rendered computer graphics rendered from computer graphics is displayed on the display," and is so unclear as to render the claim indefinite. It is unclear whether there are two different types of graphics sources or a single source of graphics, and its/their relation to the rest of the system is unclear.

Moreover, the claim is overall insufficient to give definite guidance to one of ordinary skill in the art to achieve the invention. It appears that not all essential elements are claimed (e.g., the lenticular lens sheet), and the relations between all these elements is

not clearly communicated. Examiner suspects that errors in the translation of this application have caused or at least exacerbated the confusion in this case.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

For the reasons set forth above, Examiner cannot determine the metes or bounds of the claims, and the claims are therefore rejected for indefiniteness.

The dependent claims inherit the same problems from the parent claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, as best as are understood, are rejected under 35 U.S.C. 102(b) as being anticipated by White (WO 96/35975)(supplied by Applicant in IDS).

Regarding claim 1, White discloses a method for combining an optical hologram having a virtual content with computer graphics (Abstr.) by using a semi-transparent optical element (Abstr.; Fig. 18: 5), a hologram (Abstr.), a display on an optical element side (23) which is pointing away from an observer (Fig. 18), and a video projector (15), wherein the holographic image of the hologram appears overlaid with the picture of the display (Abstr.), characterized in that the hologram is illuminated by an illumination image projected by the video projector (Fig. 18), and a holographic wavefront, visible for

the observer, is reconstructed, and simultaneously a rendered computer graphics rendered from the computer graphics is displayed on the display (Abstr.; Fig. 18).

Regarding claims 2-4, White further discloses that, using the light projected by the video projector (Fig. 18: 15) by means of the image projected by it, the amplitude of the wavefront is modified in places (i.e., in holography, light that interferes creates interferences); that parts of the holographic image are emphasized (Abstr; i.e., ambient light reflections are reduced or eliminated to reduce distractions); that, using the light of the video projector (15) by means of the image projected it, the wavefront is reconstructed in parts only (Abstr.).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Doak whose telephone number is 571-272-9791. The examiner can normally be reached on Mon-Thur: 7:30A-5:00P, Alt Fri: 7:30A-4:00P (EST).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD
12/13/07


Stephone B. Allen
Supervisory Patent Examiner